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PRELIMINARY ASSESSMENT/ VISUAL SITE INSPECTION

REYNOLDS METALS COMPANY
ASHVILLE, OHIO
OHD 055 352 512

FINAL REPORT

Prepared for

U.S. ENVIRONMENTAL PROTECTION AGENCY
Office of Waste Programs Enforcement
Washington, DC 20460

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EXECUTIVE SUMMARY

PRC Environmental Management, Inc. (PRC), performed a preliminary assessment and visual site inspection (PA/VSI) to identify and assess the existence and likelihood of releases from solid waste management units (SWMU) and other areas of concern (AOC) at the Reynolds Metals Company (Reynolds) facility in Ashville, Ohio. This report summarizes the results of the PA/VSI and evaluates the potential for releases of hazardous wastes or hazardous constituents from SWMUs and AOCs identified. In addition, a completed U.S. Environmental Protection Agency (EPA) Preliminary Assessment Form (EPA Form 2070-12) is included in Attachment A to assist in prioritization of RCRA facilities for corrective action.

The Reynolds facility occupies about 126 acres. Operations began in 1972 and have mainly involved aluminum metal working. The facility manufactures residential and light commercial exterior building products, including siding, shutters, and gutters.

Reynolds filed a Part A permit application in 1980 as a treatment, storage, or disposal (TSD) facility. In 1984, Reynolds withdrew the application and changed its status to a generator of hazardous waste with less than 90-day storage. The facility generates paint waste (D001, D035, F003), solvent waste (D040), nonhazardous waste oils, wastewater, and wastewater treatment sludge (F019). Most waste is shipped off site to Ross Incineration Services in Grafton, Ohio, for incineration. Wastewater treatment sludge is treated and disposed of at the Chemical Waste Management facility in Fort Wayne, Indiana.

Reynolds is surrounded by a 6-foot-high, chain-link fence topped with barbed wire. The main facility gate is operated from inside the Reynolds manufacturing building and is monitored 24 hours per day by surveillance cameras. The facility is located in a rural area; about 3,500 residents live within a 1-mile radius of the Reynolds facility.

The PA/VSI identified the following three SWMUs at the facility. No AOCs were identified.

Solid Waste Management Units

1. Waste Storage Area.
2. Wastewater Treatment Plant
3. Satellite Accumulation Areas

The potential for release to on-site soils and ground water is moderate. The Waste Storage Area (SWMU 1) is lacking sound containment devices and stressed vegetation was noted in the area. Ground water is used locally as a source of drinking water, and the nearest wells are about 600 feet southeast and downgradient from the facility. Drinking water for Ashville and the Reynolds facility is withdrawn from a well field located on the east side of Ashville about 2 miles southeast of Reynolds.

Reynolds has a high potential for releases to surface water. The facility has an National Pollutant Discharge Elimination System (NPDES) permit and has been cited for ongoing discharge violations. All facility wastewater flows directly to Reynolds wastewater treatment plant (WWTP) and is then discharged to Walnut Creek, just south of the facility. Walnut Creek empties into the Scioto River, which in turn empties into the Ohio River near Portsmouth, Ohio.

Reynolds has three air permits for a primer and finisher on a continuous coil-coating line and for a shutter-coating process. The potential for air contamination is low because Reynolds uses closed systems in its operations and has had no documented violations.

PRC recommends that soil samples be collected in the vicinity of the Waste Storage Area (SWMU 1) and analyzed for hazardous constituents. Adequate containment should be provided for hazardous waste at the facility. Because of ongoing NPDES violations, sediment samples should be collected in Walnut Creek near outfall 001. Samples should be analyzed for hazardous waste constituents.

1.0 INTRODUCTION

PRC Environmental Management, Inc. (PRC), received Work Assignment No. C05087 from the U.S. Environmental Protection Agency (EPA) under Contract No. 68-W9-0006 (TES 9) to conduct preliminary assessments (PA) and visual site inspections (VSI) of hazardous waste treatment and storage facilities in Region 5.

As part of the EPA Region 5 Environmental Priorities Initiative, the RCRA and CERCLA programs are working together to identify and address RCRA facilities that have a high priority for corrective action using applicable RCRA and CERCLA authorities. The PA/VSI is the first step in the process of prioritizing facilities for corrective action. Through the PA/VSI process, enough information is obtained to characterize a facility's actual or potential releases to the environment from solid waste management units (SWMU) and areas of concern (AOC).

A SWMU is defined as any discernible unit at a RCRA facility in which solid wastes have been placed and from which hazardous constituents might migrate, regardless of whether the unit was intended to manage solid or hazardous waste.

The SWMU definition includes the following:

- RCRA-regulated units, such as container storage areas, tanks, surface impoundments, waste piles, land treatment units, landfills, incinerators, and underground injection wells
- Closed and abandoned units
- Recycling units, wastewater treatment units, and other units that EPA has generally exempted from standards applicable to hazardous waste management units
- Areas contaminated by routine and systematic releases of wastes or hazardous constituents. Such areas might include a wood preservative drippage area, a loading-unloading area, or an area where solvent used to wash large parts has continually dripped onto soils.

An AOC is defined as any area where a release to the environment of hazardous waste or constituents has occurred or is suspected to have occurred on a nonroutine and nonsystematic basis. This includes any area where such a release in the future is judged to be a strong possibility.

The purpose of the PA is as follows:

- Identify SWMUs and AOCs at the facility.
- Obtain information on the operational history of the facility.
- Obtain information on releases from any units at the facility.
- Identify data gaps and other informational needs to be filled during the VSI.

The PA generally includes review of all relevant documents and files located at state offices and at the EPA Region 5 office in Chicago.

The purpose of the VSI is as follows:

- Identify SWMUs and AOCs not discovered during the PA.
- Identify releases not discovered during the PA.
- Provide a specific description of the environmental setting.
- Provide information on release pathways and the potential for releases to each medium.
- Confirm information obtained during the PA regarding operations, SWMUs, AOCs, and releases.

The VSI includes interviewing appropriate facility staff, inspecting the entire facility to identify all SWMUs and AOCs, photographing all SWMUs, identifying evidence of releases, initially identifying potential sampling locations, and obtaining all information necessary to complete the PA/VSI report.

This report documents the results of a PA/VSI of the Reynolds Metals Company (Reynolds) facility in Ashville, Ohio. The PA was completed on July 10, 1991. PRC gathered and reviewed information from the Ohio Environmental Protection Agency (OEPA) and from EPA Region 5 RCRA files. The VSI was conducted on July 11, 1991. It included interviews with facility representatives and a walk-through inspection of the facility. Three SWMUs and no AOCs were identified at the facility.

PRC completed EPA Form 2070-12 using information gathered during the PA/VSI. This form is included in Attachment A. The VSI is summarized and seven inspection photographs are included in Attachment B. Field notes from the VSI are included in Attachment C.

2.0 FACILITY DESCRIPTION

This section describes the facility's location, past and present operations (including waste management practices), waste generating processes, release history, regulatory history, environmental setting, and receptors.

2.1 FACILITY LOCATION

Reynolds occupies about 126 acres (at 39°43'45"N, 82°57'55"W) in the northwest corner of Pickaway County, Ohio, near Ashville. The facility is bordered by State Route 752 on the south, a C & O Railroad right-of-way on the east, and farmland on the north and west (see Figure 1). Reynolds is about 17 miles south of Columbus, Ohio.

2.2 FACILITY OPERATIONS

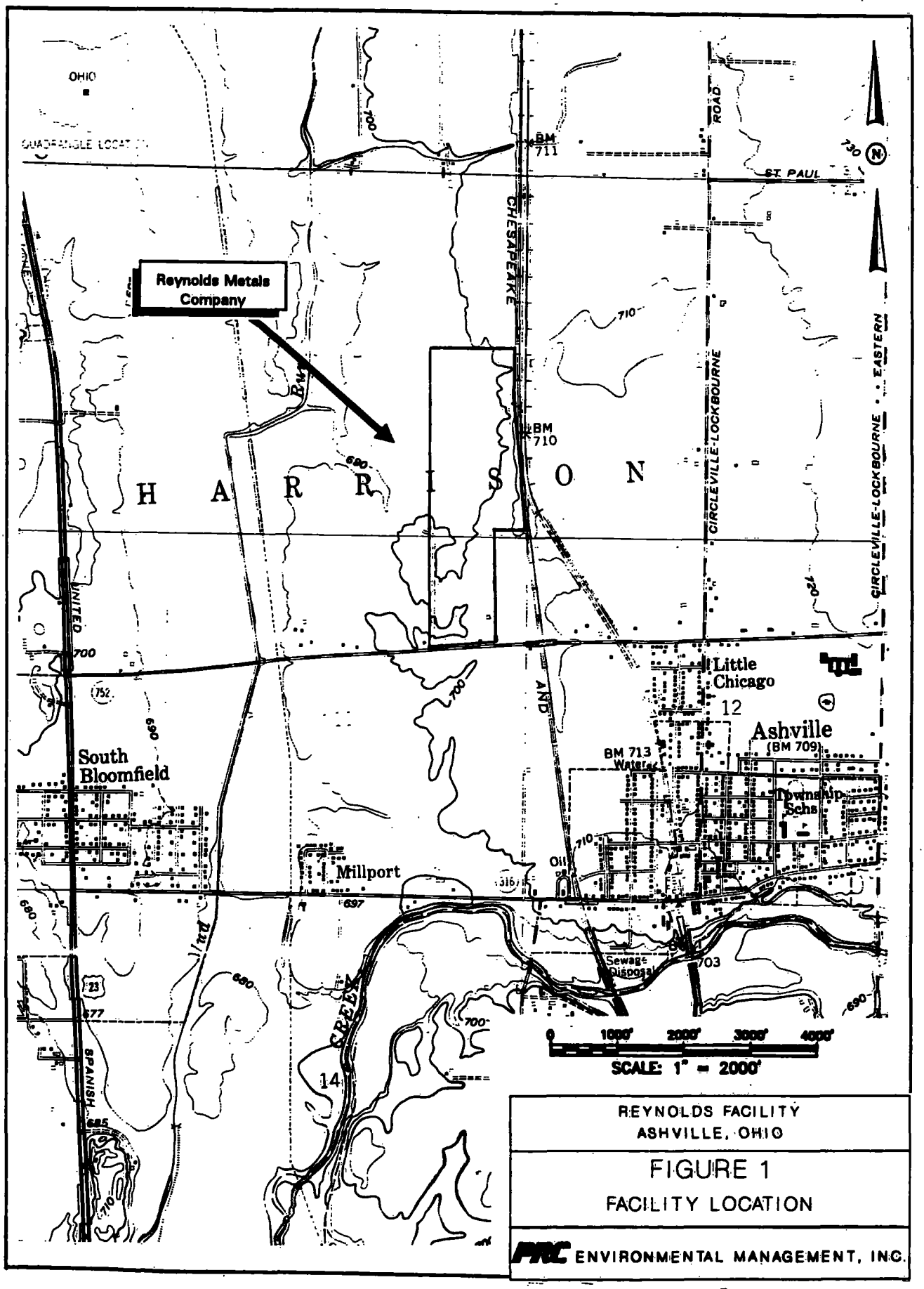
Reynolds began operations in 1972 and has had a number of expansions over the years. The facility has a minimum of 100 and a maximum of 150 employees working four shifts. Facility operations involve manufacturing of residential and light commercial exterior building products, including siding, shutters, and gutters. Facility operations are slowly changing from manufacturing aluminum products to manufacturing high-grade plastic and vinyl products such as shutters. Raw materials are formulated into various products through a number of presses, painted, and shipped from the facility in bulk.

Three SWMUs were identified during the PA/VSI: a Waste Storage Area, a Wastewater Treatment Plant, and Satellite Accumulation Areas (see Table 1 and Figure 2).

2.3 WASTE GENERATING PROCESSES

Reynolds generates paint wastes, waste solvents, waste oils, wastewater, and wastewater treatment sludge (see Table 2).

Aluminum enters the facility in rolls of sheeting. It is cleaned with a sodium hydroxide (NaOH) solution, conversion-coated with a chromium compound, and painted. The conversion-coating process allows paint to adhere to the aluminum. In 1987, Reynolds changed from spray-cleaning and conversion-coating the aluminum to using roll-coating processes. The spray-



SOURCE: Modified from USGS 7-1/2 Minute Topographic Quadrangle Map, Ashville, Ohio, 1961

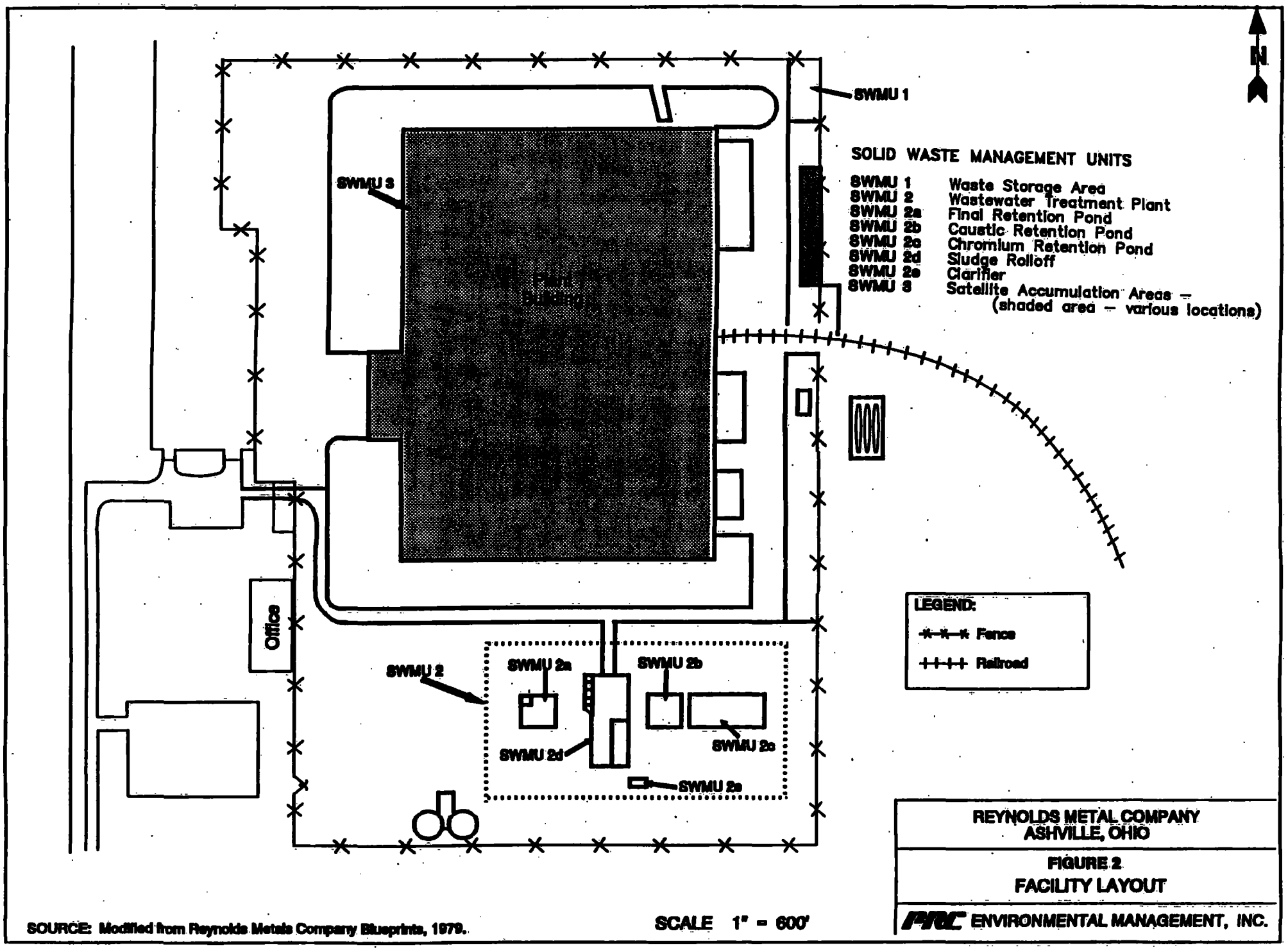
TABLE 1

SOLID WASTE MANAGEMENT UNITS (SWMU)

SWMU Number	SWMU Name	RCRA Hazardous Waste Management Unit*	Status
1	Waste Storage Area	Yes	Active (less than 90-day storage)
2	Wastewater Treatment Plant	No	Active
3	Satellite Accumulation Areas	No	Active

Note:

* A RCRA hazardous waste management unit is one that currently requires or formerly required a RCRA Part A or Part B permit.



SOURCE: Modified from Reynolds Metals Company Blueprints, 1979.

SCALE 1" = 600'

REYNOLDS METAL COMPANY
ASHVILLE, OHIO

FIGURE 2
FACILITY LAYOUT

ENVIRONMENTAL MANAGEMENT, INC.

TABLE 2

SOLID WASTES

Waste/EPA Waste Code	Source	Primary Management Unit
Paint Waste/D001, D035, F003	Strip Paint Lines	1 and 3
Solvent Waste/D040	Shutter Painting	1 and 3
Waste Oils	Maintenance	1 and 3
Wastewater	Cleaning and Conversion-Coating	2
Wastewater Treatment Sludge/F019	Cleaning and Conversion Coating	2

cleaning system consisted of nozzles that sprayed NaOH solution and chromium compound on the aluminum as it moved through the cleaning and conversion-coating processes. Now the aluminum is roll-coated with NaOH solution and chromium compound as it is rolled through the cleaning and conversion process (Johnson, 1991a).

Paint waste (D001, D035, and F003) is generated from paint color changes and cleaning of roll-painting trays. Most paint waste is removed in a bulk truck; the rest is placed in 55-gallon drums in Satellite Accumulation Areas (SWMU 3) which are eventually moved to the Waste Storage Area (SWMU 1). Eighty-five percent of the paint waste removed is backwash (solvents and water used for cleaning) (Johnson, 1991a).

Solvent waste (D040) is generated when nitrogen foam shutters are sent through a trichloroethylene cleaning system (Johnson, 1991b). Paint wastes and solvent wastes are placed in 55-gallon drums in Satellite Accumulation Areas (SWMU 3) and, when full, the drums are transferred to the Waste Storage Area (SWMU 1). The paint wastes and solvent wastes are shipped to Ross Incineration Services, Inc. (Ross), in Grafton, Ohio for fuels blending or incineration depending on the value of the material.

Waste oils are generated by Reynolds from maintenance of machinery. Waste oils are collected in 55-gallon drums in Satellite Accumulation Areas (SWMU 3) and transferred to the Waste Storage Area (SWMU 1). The waste oils are eventually removed from the facility by bulk truck to any of a variety of recycling firms.

Wastewater is generated from coil-coating , extrusion-coating, conversion-coating, and other facility processes. All wastewater empties into a caustic retention pond south of the main building. The facility has a chromium wastewater retention pond that is not currently used. A large amount of chromium sludge was in the chromium pond at the time of the VSI and was being removed and treated. Reynolds no longer produces large amounts of chromium wastewater, so all wastewater can be directed to the caustic pond. Treatment of the wastewater is accomplished by precipitation through the addition of a polyelectrolyte flocculent. Solids are allowed to settle and the pH is adjusted before the effluent is discharged through a National Pollutant Discharge Elimination System (NPDES) outfall (001) to Walnut Creek. Sludge is directed to a filter press for dewatering. Reynolds generates about one 20-cubic-yard roll-off of F019 sludge every 6 weeks. The roll-off is located in the Wastewater Treatment Plant (SWMU 2). Chemical Waste

Management, Inc. (CWM), transports this waste to its facility in Fort Wayne, Indiana, for treatment and disposal.

All sanitary wastewater goes through a separate treatment process involving aeration, settling, and chlorination and is discharged through NPDES outfall 601. Wastewater exiting through outfall 601 is combined with pretreated industrial wastewater. The combined wastewater is discharged through outfall 001 to Walnut Creek.

2.4 RELEASE HISTORY

The only documented releases from Reynolds have been wastewater releases exceeding National Pollutant Discharge Elimination System (NPDES) permit limitations. Reynolds has occasionally violated all its parameters in the past, but releases have mainly involved total suspended solids (TSS) and biological oxygen demand (BOD) from outfall 001.

Reynolds has had recurring releases of suspended solids since the mid-1970s (Reynolds, 1976 and OEPA, 1986c). The last TSS violation occurred in August 1990; since that time, no other TSS violations have been documented (OEPA, 1990a). To help correct this problem, facility wastewater is given longer time to settle.

Reynolds began having problems involving BOD in the mid-1980s (OEPA, 1986c and OEPA, 1990b). To correct these problems, Reynolds constructed a cover for its final settling pond to prevent algae growth. In the early 1990s, Reynolds started performing its own BOD testing to ensure that the BOD level of its wastewater did not change after treatment (Johnson, 1991a). This testing also provided quick results to ensure proper treatment was applied to the wastewater.

In January 1991, because of repeated NPDES violations, OEPA conducted a series of water quality tests in Walnut Creek at outfall 001. These tests indicated that Reynolds' effluent was acutely toxic to Walnut Creek's small aquatic life (OEPA, 1991a). No followup to these tests has been documented. However, OEPA is considering followup testing.

2.5 REGULATORY HISTORY

In May 1971, the Ohio Department of Health (ODH) approved plans for construction of the Reynolds wastewater treatment plant (ODH, 1971). Reynolds began operations at the facility in 1972.

In August 1980, Reynolds filed a RCRA Notification of Hazardous Waste Activity. In November 1980, Reynolds filed a Part A permit application as a treatment, storage, and disposal (TSD) facility (OEPA, 1984), with storage in containers and surface impoundments. In 1982, Reynolds submitted a revised Part A permit application to EPA deleting surface impoundments because the units were part of the Wastewater Treatment Plant (SWMU 2) operations (Reynolds, 1982). In early 1984, Reynolds elected to withdraw the Part A permit application. In July 1984, Reynold's request for a change to generator status was approved by EPA (EPA, 1984).

Since operations began at Reynolds, no major RCRA violations have been documented. In the most recent inspection, OEPA cited Reynolds for violations including lack of required spill absorbent in certain areas, open waste containers, and a 55-gallon drum in the waste storage area that was patched with putty (OEPA, 1991b).

Reynolds has two NPDES outfalls (001 and 601) that have been in use since facility operations began. Out fall 601 is for discharges from the treatment of sanitary wastewater. Effluent from outfall 601 is combined with treated process wastewater and is discharged through outfall 110 to Walnut Creek. Reynolds was first granted an NPDES permit in 1973 (associated parameters were not listed in the OEPA wastewater file) (OEPA, 1974).

In June 1985, OEPA inspected Reynolds for proper NPDES testing procedures; samples of effluent were collected. OEPA noted several major problems involving improper flow measurement, wastewater sampling (refrigeration, preservation, and use of proper containers), and recording of data on monthly monitoring report forms. Reynolds had also failed to obtain a required written report from its testing lab regarding sample holding times, quality control and quality assurance, and test methods and procedures. During the 1985 inspection, OEPA also found that outfall 001 was leaking through cracks in the concrete retaining wall by the weir. Reynolds corrected the problem immediately (OEPA, 1985).

In January 1986, OEPA informed Reynolds that the company was not using appropriate sample containers and preservatives for its wastewater effluent testing. Reynolds was directed to start keeping strip chart recordings of its flow measurements and a log recording calibrations of its flow measuring device. OEPA also required Reynolds to take duplicate samples of its effluent periodically (OEPA, 1986b).

In a letter from OEPA dated February 1986, Reynolds was informed that its unattended operations of the WWTP in January 1986 was a violation of its NPDES permit. Also, the method Reynolds had used for testing for total chromium was not EPA-approved (OEPA, 1986a). A follow-up inspection in late March 1986, found similar problems (OEPA, 1986d).

A March 1986 NPDES permit authorized Reynolds to discharge treated wastewater under the following parameters (OEPA, 1986e):

Outfall 001	Outfall 601
Flow	Flow
Oil and Grease	BOD
TSS	TSS
Total Chromium	Residual Chlorine
Total Zinc	Color
Total Aluminum	Odor
Total Cyanide	Turbidity
BOD	
Ammonia	
Hexavalent Chromium	
Total Phosphorous	
Fecal Coliform	

In April 1986, Reynolds appealed for modification of the hexavalent chromium limitations in its NPDES permit, indicating that they were too stringent (Reynolds, 1986). Reynolds won the appeal, and modifications were approved by OEPA in August 1986 (OEPA, 1986f).

As mentioned in Section 2.4, Reynolds has had wastewater discharge problems mainly involving TSS and BOD violations. Other problems have involved improper operation and testing procedures at the wastewater treatment plant (Reynolds, 1989; OEPA, 1990c and 1991c). In early 1991, OEPA performed water quality tests in Walnut Creek at the 001 outfall and found that Reynold's effluent was acutely toxic to small aquatic life. No further testing has been performed.

Reynolds has three air permits for a primer and finisher on a continuous coil-coating line and for a shutter-coating process. Reynolds uses closed systems in its operations and has had no documented violations.

2.6 ENVIRONMENTAL SETTING

This section describes the climate, flood plain and surface water, geology and soils, and ground water in the vicinity of the Reynolds facility.

2.6.1 Climate

Pickaway County is cold in winter and uncomfortably warm in summer. Winter precipitation, frequently snow, accumulates enough moisture in most soils by spring to minimize drought during summer. In winter, the average temperature is 33 °F, and the average daily minimum temperature is 24 °F. The lowest temperature recorded was -17 °F on January 28, 1963. In summer, the average temperature is 73 °F, and the average daily maximum temperature is 85 °F. The highest recorded temperature was 103 °F on July 14, 1954. The average seasonal snowfall is 13 inches. The average relative humidity is 60 percent at midafternoon. Humidity is higher at night, and the average at dawn is about 80 percent. The prevailing wind is from the south-southwest. Average windspeed is highest in March at 11 miles per hour. Tornados and severe thunderstorms occur occasionally; however, these storms are generally local and of short duration. The average yearly rainfall in Pickaway County is 38.03 inches. Rainfall peaks in May at 4.16 inches; the least monthly rainfall is 2.05 inches in October. The 1-year, 24-hour maximum rainfall is 2.5 inches, and the annual net precipitation is 7.0 inches (USDA, 1980).

2.6.2 Flood Plain and Surface Water

The Reynolds facility is not located in a 100-year flood plain (National Flood Insurance Program, 1978). Mud Run Creek runs about 1,750 feet to the west of Reynolds and empties into Walnut Creek, which is about 3,600 feet south of Reynolds. Walnut Creek empties into the Scioto River, which is west of Reynolds, and the Scioto River empties into the Ohio River near Portsmouth, Ohio. No municipal drinking water intakes are located on the Scioto River south of Walnut Creek. These bodies of water are used for industry, agriculture, recreational activities, and they provide a habitat for area wildlife.

A drainage ditch lies about 10 feet east of the waste storage area. During the VSI, the drainage ditch was dry and appeared to be is mainly for stormwater runoff

2.6.3 Geology and Soils

Pickaway County is made up of bedrock from the Devonian and Mississippian Ages. Bedrock in the vicinity of Reynolds is composed of thick-bedded Devonian limestones, that lie at a depth of about 150 feet (ODNR, 1943).

The community of Ashville lies on a glaciated plain at an elevation of about 710 feet. Pleistocene glaciers (Illinoisan and Wisconsinan) covered the area and left a thick coating of glacial drift.

Glacial deposits beneath the facility can be divided into the following units (ODNR, 1991):

- 0 to 10 feet - yellow clay
- 10 to 28 feet - yellow clay and gravel
- 28 to 32 feet - sand and gravel
- 32 to 48 feet - gravel and clay
- 48 to 51 feet - gravel
- 51 to 89 feet - sand and gravel

Soils in the area are comprised of the Crosby-Kokomo association. The soils are somewhat poorly drained, formed from medium textured glacial till (USDA, 1980).

2.6.4 Ground Water

Ashville is located along the line of the deep stage of the ancient Newark River with a floor level of about 510 feet and a fill of some 140 feet. The sand and gravel layers in the glacial deposits yield excellent water supplies (ODNR, 1943).

The ground-water table in the vicinity of the Reynolds facility ranges from 15 feet below ground surface to the west of Reynolds to 28 feet below ground surface to the east of Reynolds. Ground-water flow is primarily from north to south. Ground water in the vicinity is used as a primary source of drinking water, and is also used for agriculture. The closest ground-water wells are about 600 feet southeast of Reynolds, downgradient from the facility (ODNR, 1991).

Drinking water for Ashville and the Reynolds facility comes from well fields located on the east side of Ashville about 2 miles southeast of Reynolds.

2.7 RECEPTORS

The Reynolds facility is located in a rural area of Harrison Township in Pickaway County. The facility has about 30 employees. A number of villages lie within a 1-mile radius of Reynolds; they have a total population of about 3,500 residents. The nearest school is about 1 mile southeast of the facility. Ground water is the primary source of drinking water in the area, and as mentioned in Section 2.6.4, a number of wells are located about 600 feet downgradient from the facility.

Walnut Creek is an environmental receptor because Reynolds' treated wastewater effluent leaves the facility via this route. Releases in excess of Reynolds' NPDES permit limitations could affect wildlife and vegetation in the area of Walnut Creek and possibly the Scioto River. There are no sensitive environments in the vicinity of Reynolds.

Reynolds is surrounded by a 6-foot-high chain-link fence topped with barbed wire. The main gate is monitored 24 hours per day by a surveillance camera (Johnson, 1991a).

The main receptors for any facility releases are on-site employees. Everyday operations could expose them to contaminated air and hazardous materials.

3.0 SOLID WASTE MANAGEMENT UNITS

This section describes the three SWMUs identified during the PA/VSI. The following information is presented for each SWMU: description of the unit, dates of operation, wastes managed, release controls, history of release, and PRC observations.

SWMU 1	**Waste Storage Area**
Unit Description:	The less than 90-day waste storage area is located on the northeast side of the Reynolds manufacturing building. This outdoor area has an unbermed, uncovered, asphalt pad. It stores empty drums, drums filled with hazardous waste, and drums filled with nonhazardous waste (see Photograph Nos. 1 and 2).
Date of Startup:	This unit started operating in 1972.
Date of Closure:	This unit is currently operational. A closure plan for the area was unavailable at the time of the file review.
Wastes Managed:	All full drums of hazardous paint wastes and solvents are stored at this location until they are removed for disposal. The area also houses waste oils.
Release Controls:	The area has an uncovered, unbermed, asphalt pad.
History of Release:	No releases from this unit have been documented.
Observations:	During the VSI, about 100 55-gallon drums of waste were in the unit and the asphalt surface was worn and stained. Nearby vegetation was stressed, although PRC could not determine whether this was caused by releases from the unit (see Photograph No. 3). No stained soil was noted.

SWMU 2 **Wastewater Treatment Plant**

Unit Description:

The WWTP is located on the south side of the Reynolds manufacturing building. Wastewater generated from the chemical conversion of aluminum is directed to a caustic retention pond. Two retention ponds have been used by Reynolds - a chromium wastewater retention pond and a caustic wastewater retention pond. The chromium retention pond measures 60 feet by 100 feet and has a capacity of about 250,000 gallons (see Photograph Nos. 4 and 5). The caustic retention pond measures 60 feet by 60 feet and has a capacity of about 150,000 gallons (see Photograph No. 6). Each pond is made of cinder blocks resting on a concrete base. Both contain a reinforced hypolene liner. The chromium retention pond is no longer used, although it contains waste sludge. It is equipped with a drainage grid under the liner which is used for leak detection. Reynolds wants to close the pond and plans to remove the sludge once closure is approved. A closure plan has not been submitted for the pond.

From the caustic pond, wastewater flows to a pH adjustment unit where sulfuric acid or a lime slurry is added to control pH. A flocculent is then added to the wastewater to cause precipitation. Wastewater then flows to a clarifier, allowing solid material to settle. The solids are then removed to a filter press for partial removal of water. Chromium conversion sludge (F019) is then removed from the filter press and is accumulated in a roll-off container. The pH of the final effluent is adjusted if necessary, and the treated wastewater is discharged from the facility.

Reynolds also operates a sanitary wastewater treatment system. Sanitary wastewater is treated by chemical addition and aeration. Treated wastewater flows to a final retention pond before discharged from the facility. The final retention pond for sanitary wastewater measures 30 feet by 30 feet and has a capacity of about 25,000 gallons (see Photograph No. 7). It is constructed of cinder

	blocks resting on a concrete pad. The pond is lined with a sealant and is kept covered to prevent algae growth.
Date of Startup:	The unit started operating in 1972.
Date of Closure:	The unit is currently operational.
Wastes Managed:	The unit receives caustic wastewater and sanitary wastewater. A chromium conversion sludge (F019) is generated in the unit.
Release Controls:	The ponds are made of concrete and cinder blocks and are lined. The chromium pond has a drainage grid under its liner to allow detection of leaks. The tanks are inspected daily by Reynolds personnel.
History of Release:	Throughout the 1980's, Reynolds had limited problems with pH and TSS and BOD limits.
Observations:	At the time of the VSI, the chromium pond liner had a large tear and was being repaired. Reynolds informed PRC that repairs had begun on the liner 24 hours after discovery of the tear.
SWMU 3	**Satellite Accumulation Areas**
Unit Description:	Reynolds uses 55-gallon, steel drums for satellite accumulation throughout the facility. The locations of the drums vary depending on operations. When full, the drums are transferred to the Waste Storage Area (SWMU 1) until removed from the facility.
Date of Startup:	Satellite accumulation areas have been used since the early 1980s.
Date of Closure:	The units are currently operational.
Wastes Managed:	Paint wastes, solvent wastes, and waste oils are accumulated in the areas.

Release Controls:	**The drums are kept indoors on solid concrete until full.**
History of Release:	**No releases have been reported for the areas.**
Observations:	**The drums used for satellite accumulation were in sound condition and properly labeled.**

4.0 AREAS OF CONCERN

PRC identified no AOCs during the PA/VSI.

5.0 CONCLUSIONS AND RECOMMENDATIONS

The PA/VSI identified three SWMUs and no AOCs at the Reynolds facility. Background information on the facility's location, operations, waste generating processes, release history, regulatory history, environmental setting, and receptors is presented in Section 2.0. SWMU-specific information, such as the unit's description, dates of operation, wastes managed, release controls, release history, and observed condition, is discussed in Section 3.0. Following are PRC's conclusions and recommendations for each SWMU. Table 3 identifies the SWMUs at the Reynolds facility and suggested further actions.

SWMU 1 **Waste Storage Area**

Conclusions: This area stores empty drums, drums containing nonhazardous waste, and drums containing hazardous waste. The area has a worn, stained asphalt pad. About 10 feet east of this area is a drainage ditch. Spills or storm water runoff could contaminate the drainage ditch because the unit has no berm or sump. The potential for release to specific environmental media is summarized below:

Ground Water: Moderate. Because the unit has no berm or sump, spills or storm water runoff could reach soils and eventually penetrate to ground water. A clay layer is located beneath the facility; however, it is not known if the clay is continuous throughout the facility area.

Surface Water: Moderate. Because the unit has no berm or sump, spills or storm water runoff could reach the drainage ditch and contaminate the water in it.

Air: Low. An air release could only occur if there was a severe spill. Because the amount of waste kept in the area is small, the potential for a release to air is low.

On-Site Soils: Moderate. Because the unit has no berm or sump, spills or storm water runoff could reach on-site soils.

TABLE 3

SWMU SUMMARY

SWMU	Operational Dates	Evidence of Release	Suggested Further Action
1. Waste Storage Area	1972 to present	None	Reynolds should provide adequate containment for waste storage. Soils in the vicinity of the unit should be sampled and analyzed for hazardous constituents.
2. Wastewater Treatment Plant	1972 to present	Reynolds has had limited violations of its NPDES permit parameters.	Sediment samples should be collected from the Walnut Creek near NPDES outfall 001. Samples should be analyzed for hazardous constituents.
3. Satellite Accumulation Areas	Early-1980s to present	None	No further action is recommended.

Recommendations: PRC recommends that Reynolds provide sufficient containment for waste storage to prevent spill and storm water runoff releases. Soils in the vicinity of the unit should be sampled and analyzed for hazardous constituents.

SWMU 2 **Wastewater Treatment Plant**

Conclusions: This unit is located on the south side of the Reynolds manufacturing building. The plant is used for treatment of caustic wastewater and sanitary wastewater. Reynolds has had limited discharge problems - most problems have involved operation and testing procedures. The potential for release to specific environmental media is summarized below:

Ground Water: Low. Because the retention tanks are lined and inspected regularly, the potential for release to ground water is low.

Surface Water: High. Reynolds has had ongoing violations of its NPDES permit.

Air: Low. Because the wastewater has low volatility, the potential for release to air is low.

On-Site Soils: Low. Because of the design of the unit, the potential for release to on-site soils is low.

Recommendations: Reynolds has had ongoing violations of its NPDES permit. Sediment sampling should be performed in Walnut Creek in the vicinity of NPDES outfall 001, and the samples should be analyzed for hazardous constituents.

SWMU 3 **Satellite Accumulation Areas**

Conclusions: Reynolds uses 55-gallon, steel drums for satellite accumulation. The drums are monitored regularly and moved to the waste storage area (SWMU 1) when full. The potential for release to environmental media is summarized below:

Ground Water: Low. The satellite accumulation areas are indoors on solid concrete.

Surface Water: Low. The areas are not near any wastewater or surface water receiving areas.

Air: Low. The drums in the satellite accumulation areas are kept closed.

On-Site Soils: Low. The areas are indoors on solid concrete.

Recommendations: No further action is recommended at this time.

REFERENCES

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OEPA, 1986c. Letter to Reynolds Concerning NPDES Violations, March 27.

OEPA, 1986d. Inspection Report, March 30.

OEPA, 1986e. Reynolds Authorization to Discharge, March 31.

OEPA, 1986f. Modification Worksheet for NPDES, August 29.

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OEPA, 1990b. Reynolds Violation of BOD, July 19.

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OEPA, 1991b. Robert Almquist, Telephone Conversation with Kimberly Jenkins, PRC, August 8.

OEPA, 1991c. Water Quality Based Effluent Limits Report for Reynolds, January 16.

Reynolds Metals Company (Reynolds), 1976. Letter to EPA Concerning a Release in October, October 15.

Reynolds, 1979. Reynolds Metals Company Blueprints of the Facility.

Reynolds, 1982. Revised Part A Permit, August 17.

Reynolds, 1986. Reynolds Appeal to NPDES Hexavalent Chromium Limitation, April 29.

Reynolds, 1989. Report to OEPA Discussing Wastewater Treatment Plant, April 27.

U.S. Department of Agriculture (USDA), 1980. Soil Survey of Pickaway County.

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U.S. Geological Survey (USGS), 1961. 7½ Minute Topographic Quadrangle Map, Ashville, Ohio.

ATTACHMENT A

EPA PRELIMINARY ASSESSMENT FORM 2070-12

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 1 - SITE INFORMATION AND ASSESSMENT

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	OHD 055 352 512

II. SITE NAME AND LOCATION

01 SITE NAME (Legal, common, or descriptive name of site)	02 STREET, ROUTE NO., OR SPECIFIC LOCATION IDENTIFIER				
Reynolds Metals Company	Reynolds Road, P.O. Box 12				
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 COUNTY**	**07 COUNTY CODE**	**08 CONG DIST**
Ashville	Ohio	43103	Pickaway		
09 COORDINATES: LATITUDE 39°4 3' 4 6", N	**LONGITUDE** 8 2° 5 7' 5 5", W				

10 DIRECTIONS TO SITE *(Starting from nearest public road)*

Take State Route 23 and exit on Route 752 East. Reynolds Road is on the left about 1 mile east on 752.

III. RESPONSIBLE PARTIES

01 OWNER *(If known)*	02 STREET *(Business, mailing residential)*		
Reynolds Metals Company, L.C. Tropea	6601 West Broad Street		
03 CITY	**04 STATE**	**05 ZIP CODE**	**06 TELEPHONE NUMBER**
Richmond	VA	23261	(804) 281-3971
07 OPERATOR *(If known and different from owner)*	**08 STREET** *(Business, mailing, residential)*		
09 CITY	**10 STATE**	**11 ZIP CODE**	**12 TELEPHONE NUMBER**
			( )

13 TYPE OF OWNERSHIP *(Check one)*

■ A. PRIVATE ☐ B. FEDERAL: _____ (Agency name) ☐ C. STATE ☐ D. COUNTY ☐ E. MUNICIPAL

☐ F. OTHER _____ (Specify) ☐ G. UNKNOWN

14 OWNER/OPERATOR NOTIFICATION ON FILE *(Check all that apply)*

☐ A. RCRA 3010 DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ☐ B. UNCONTROLLED WASTE SITE *(CERCLA 103 c)* DATE RECEIVED: ___/___/___ (MONTH DAY YEAR) ■ C. NONE

IV. CHARACTERIZATION OF POTENTIAL HAZARD

01 ON SITE INSPECTION ■ YES DATE 07/11/91 ☐ NO

BY *(Check all that apply)* ☐ A. EPA ■ B. EPA CONTRACTOR ■ C. STATE ☐ D. OTHER CONTRACTOR ☐ E. LOCAL HEALTH OFFICIAL ☐ F. OTHER: _____ (Specify)

CONTRACTOR NAME(S): PRC Environmental Management Inc.

02 SITE STATUS *(Check one)*	03 YEARS OF OPERATION
■ A. ACTIVE ☐ B. INACTIVE ☐ C. UNKNOWN	1971 (BEGINNING YEAR) / NA: Active (ENDING YEAR) ☐ UNKNOWN

04 DESCRIPTION OF SUBSTANCES POSSIBLY PRESENT, KNOWN, OR ALLEGED

Waste Paint, Wastewater Sludge

05 DESCRIPTION OF POTENTIAL HAZARD TO ENVIRONMENT AND/OR POPULATION

Potential for ground-water contamination.

Potential for surface water contamination.

Potential for on-site soil contamination.

V. PRIORITY ASSESSMENT

01 PRIORITY FOR INSPECTION *(Check one. If high or medium is checked, complete Part 2 - Waste Information and Part 3 - Description of Hazardous Conditions and Incidents.)*

☐ A. HIGH *(Inspection required promptly)* ■ B. MEDIUM *(Inspection required)* ☐ C. LOW *(Inspect on time-available basis)* ☐ D. NONE *(No further action needed; complete current disposition form)*

VI. INFORMATION AVAILABLE FROM

01 CONTACT	02 OF *(Agency/Organization)*			03 TELEPHONE NUMBER
Kevin Pierard	EPA Region 5			(312) 886-4448
04 PERSON RESPONSIBLE FOR ASSESSMENT	**05 AGENCY**	**06 ORGANIZATION**	**07 TELEPHONE NUMBER**	**08 DATE**
Kimberly Jenkins		PRC EMI	(513) 241-0148	07/11/91 (MONTH DAY YEAR)

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 2 - WASTE INFORMATION

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	OHD 066 352 512

II. WASTE STATES, QUANTITIES, AND CHARACTERISTICS

01 PHYSICAL STATES *(Check all that apply)*

- ■ A. SOLID
- □ B. POWDER, FINES
- ■ C. SLUDGE
- ■ E. SLURRY
- ■ F. LIQUID
- □ G. GAS
- □ D. OTHER _____ *(Specify)*

02 WASTE QUANTITY AT SITE *(Measures of waste quantities must be independent)*

TON unknown

CUBIC YARDS 20/6 weeks

NO. OF DRUMS ~ 30

03 WASTE CHARACTERISTICS *(Check all that apply)*

- ■ A. TOXIC
- □ B. CORROSIVE
- □ C. RADIOACTIVE
- □ D. PERSISTENT
- □ E. SOLUBLE
- □ F. INFECTIOUS
- ■ G. FLAMMABLE
- □ H. IGNITABLE
- □ I. HIGHLY VOLATILE
- □ J. EXPLOSIVE
- □ K. REACTIVE
- □ L. INCOMPATIBLE
- □ M. NOT APPLICABLE

III. WASTE TYPE

CATEGORY	SUBSTANCE NAME	01 GROSS AMOUNT	02 UNIT OF MEASURE	03 COMMENTS
SLU	SLUDGE	~ 173	Yards	
OLW	OILY WASTE			
SOL	SOLVENTS			
PSD	PESTICIDES			
OCC	OTHER ORGANIC CHEMICALS			
IOC	INORGANIC CHEMICALS			
ACD	ACIDS			
BAS	BASES	~50,000	Gallons	
MES	HEAVY METALS			

IV. HAZARDOUS SUBSTANCES *(See Appendix for most frequently cited CAS Numbers)*

01 CATEGORY	02 SUBSTANCE NAME	03 CAS NUMBER	04 STORAGE/DISPOSAL METHOD	05 CONCENTRATION	06 MEASURE OF CONCENTRATION
F003	Paint Waste		Drum/Bulk Tank Removed		
D001	Paint Waste		Drum/Bulk Tank Removed		
D035	Paint Waste		Drum/Bulk Tank Removed		
D040	Paint Waste		Drum/Bulk Tank Removed		
F019	Sludge		Roll-Off Removed		

V. FEEDSTOCKS *(See Appendix for CAS Numbers)*

CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER	CATEGORY	01 FEEDSTOCK NAME	02 CAS NUMBER
FDS			FDS		
FDS			FDS		
FDS			FDS		
FDS			FDS		

VI. SOURCES OF INFORMATION *(Cite specific references; e.g., state files, sample analysis, reports)*

Ohio Environmental Protection Agency (OEPA), U.S. Environmental Protection Agency (U.S. EPA), Ohio Division of Natural Resources (ODNR), Robert Johnson - Reynolds Metals Company

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION	
01 STATE	02 SITE NUMBER
OH	OHD 055 352 512

II. HAZARDOUS CONDITIONS AND INCIDENTS

01 ☒ A. GROUNDWATER CONTAMINATION | 02 ☐ OBSERVED (DATE: _____) | ■ POTENTIAL | ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: unknown | 04 NARRATIVE DESCRIPTION

The waste storage area is unbermed and uncovered. Spillage or storm water run-off could run onto unprotected ground and down into the ground-water.

01 ☒ B. SURFACE WATER CONTAMINATION | 02 ☐ OBSERVED (DATE: _____) | ■ POTENTIAL | ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: unknown | 04 NARRATIVE DESCRIPTION

A drainage ditch is located about 10 feet east of the drum storage area. A mishap could cause waste to contaminate the water in the ditch.

01 ☒ C. CONTAMINATION OF AIR | 02 ☐ OBSERVED (DATE: _____) | ■ POTENTIAL | ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 150 | 04 NARRATIVE DESCRIPTION

Paint waste dust is produced and volitile solvents are used. A severe mishap could affect employees of Reynolds Metals Company.

01 ☒ D. FIRE/EXPLOSIVE CONDITIONS | 02 ☐ OBSERVED (DATE: _____) | ■ POTENTIAL | ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 150 | 04 NARRATIVE DESCRIPTION

Flammable solvents are used and flammable waste is produced, posing a fire risk.

01 ☒ E. DIRECT CONTACT | 02 ☐ OBSERVED (DATE: _____) | ■ POTENTIAL | ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: 150 | 04 NARRATIVE DESCRIPTION

Employees of Reynolds Metals Company are likely to come into contact wth solvents used and waste produced.

01 ☒ F. CONTAMINATION OF SOIL | 02 ☐ OBSERVED (DATE: _____) | ■ POTENTIAL | ☐ ALLEGED

03 AREA POTENTIALLY AFFECTED: unknown (Acres) | 04 NARRATIVE DESCRIPTION

The waste storage area is unbermed and uncovered. Spillage or storm water run-off could run on unprotected soils.

01 ☐ G. DRINKING WATER CONTAMINATION | 02 ☐ OBSERVED (DATE: _____) | ☐ POTENTIAL | ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

None reported. None noted during VSI.

01 ☒ H. WORKER EXPOSURE/INJURY | 02 ☐ OBSERVED (DATE: _____) | ■ POTENTIAL | ☐ ALLEGED

03 WORKERS POTENTIALLY AFFECTED: 150 | 04 NARRATIVE DESCRIPTION

Workers who work with solvents and the waste produced are likely to become exposed to harmful substances or become injuried.

01 ☐ I. POPULATION EXPOSURE/INJURY | 02 ☐ OBSERVED (DATE: _____) | ☐ POTENTIAL | ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ | 04 NARRATIVE DESCRIPTION

None reported. None noted during VSI.

EPA

POTENTIAL HAZARDOUS WASTE SITE
PRELIMINARY ASSESSMENT
PART 3 - DESCRIPTION OF HAZARDOUS CONDITIONS AND INCIDENTS

I. IDENTIFICATION

01 STATE	02 SITE NUMBER
OH	OHD 055 352 512

II. HAZARDOUS CONDITIONS AND INCIDENTS (Continued)

01 ☒ J. DAMAGE TO FLORA — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☒ ALLEGED

04 NARRATIVE DESCRIPTION

There was stressed vegetation around the waste storage area, although PRC cannot determine if the cause is due to a release.

01 ☒ K. DAMAGE TO FAUNA — 02 ☒ OBSERVED (DATE: 01/81) — ☐ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION (Include name(s) of species)

Small aquatic life were found to have a high mortality rate when placed in Walnut Creek near outfall 001.

01 ☐ L. CONTAMINATION OF FOOD CHAIN — 02 ☐ OBSERVED (DATE: _____) — ☒ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

If certain native species cannot survive in Walnut Creek the food chain is likely to be affected.

01 ☐ M. UNSTABLE CONTAINMENT OF WASTES — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED

03 POPULATION POTENTIALLY AFFECTED: _____ — 04 NARRATIVE DESCRIPTION

None reported. None noted during VSI.

01 ☐ N. DAMAGE TO OFF-SITE PROPERTY — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

None reported. None noted during VSI.

01 ☐ O. CONTAMINATION OF SEWERS, STORM DRAINS, WWTPS — ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

None reported. None noted during VSI.

01 ☐ P. ILLEGAL/UNAUTHORIZED DUMPING — 02 ☐ OBSERVED (DATE: _____) — ☐ POTENTIAL — ☐ ALLEGED

04 NARRATIVE DESCRIPTION

None reported. None noted during VSI.

05 DESCRIPTION OF ANY OTHER KNOWN, POTENTIAL, OR ALLEGED HAZARDS

None to report.

III. TOTAL POPULATION POTENTIALLY AFFECTED: 150

IV. COMMENTS

A berm should be placed around the waste storage area to prevent spillage and storm water run-off from reaching soils and water supplies.

V. SOURCES OF INFORMATION *(Cite specific references; e.g., state files, sample analysis, reports)*

OEPA, U.S. EPA, ODNR, Robert Johnson - Reynolds Metals Company.

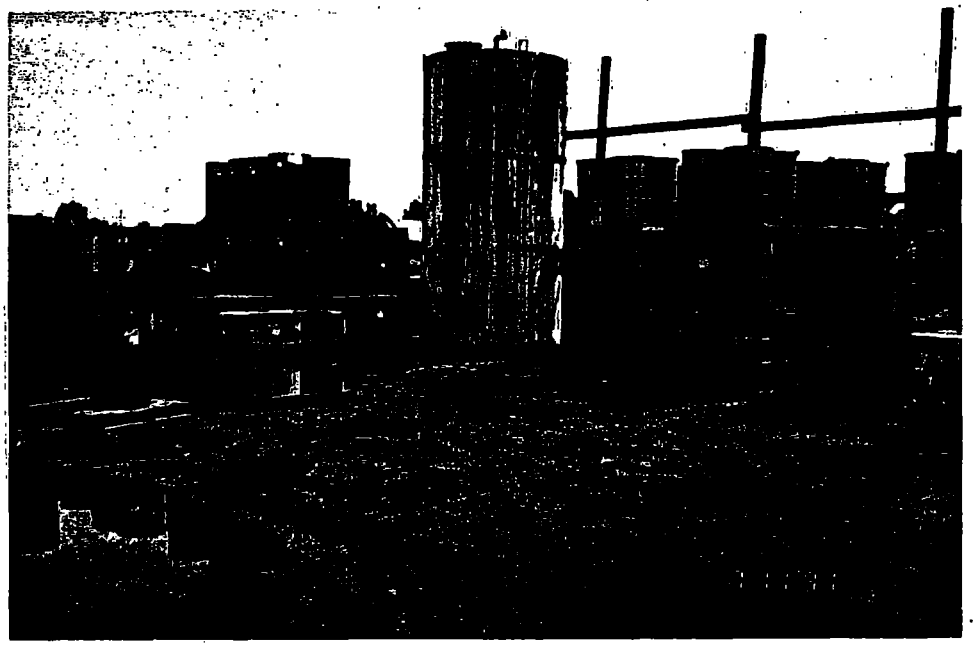
ATTACHMENT B

VISUAL SITE INSPECTION SUMMARY AND PHOTOGRAPHS

VISUAL SITE INSPECTION SUMMARY

Reynolds Metals Company
Ashville, Ohio
OHD 055 352 512

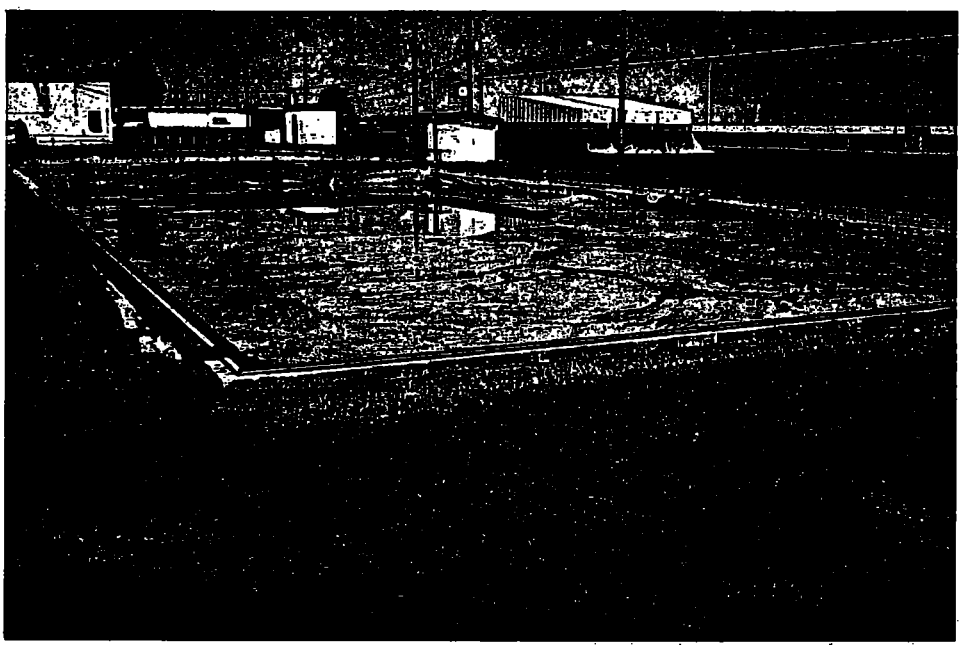
Date:	July 11, 1991
Facility Representatives:	Robert Johnson, Reynolds Metals Company (Reynolds), Engineer Dave Hannahs, Reynolds, Plant Manager
Inspection Team:	Peter Zelinskas, PRC Environmental Management, Inc. (PRC) Kimberly Jenkins, PRC Robert Almquist, Ohio Environmental Protection Agency (OEPA)
Photographer:	Peter Zelinskas
Weather Conditions:	Sunny, 87 °F
Summary of Activities:	PRC met with Reynolds personnel at 10:18 a.m. Information regarding the visual site inspection (VSI) and facility waste generation and management was exchanged. The facility walk-through began at 10:47 a.m. PRC and Reynolds personnel moved from the shutter line to the roll-coating paint lines. The outside walk-through began at 11:25 a.m. PRC and Reynolds personnel moved from the waste storage area to the wastewater treatment plant. The VSI was completed at 12:30 p.m. PRC left the facility at 12:45 p.m.



Photograph No. 1 Location: SWMU 1
Orientation: Northeast Date: 07/11/91
Description: This is the waste storage area. The tank in the middle of the photograph was a process tank and is no longer used.

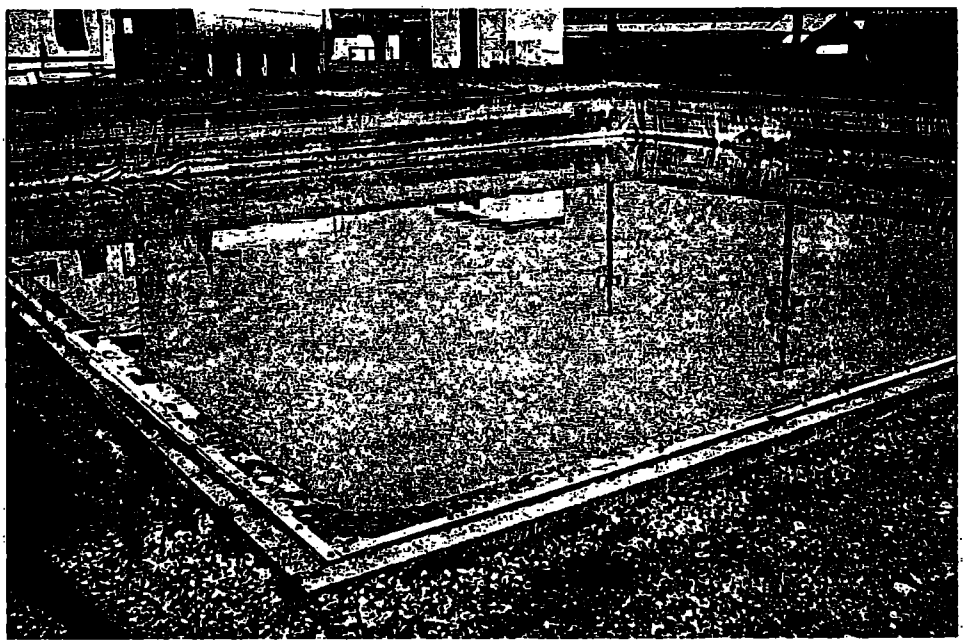
Photograph No. 2 Location: SWMU 1
Orientation: East Date: 07/11/91
Description: This is the waste storage area.

Photograph No. 3 Location: SWMU 1
Orientation: South Date: 07/11/91
Description: This is the region behind the waste storage area. About 10 feet to the left (east) of the chain-link fence is a drainage ditch.

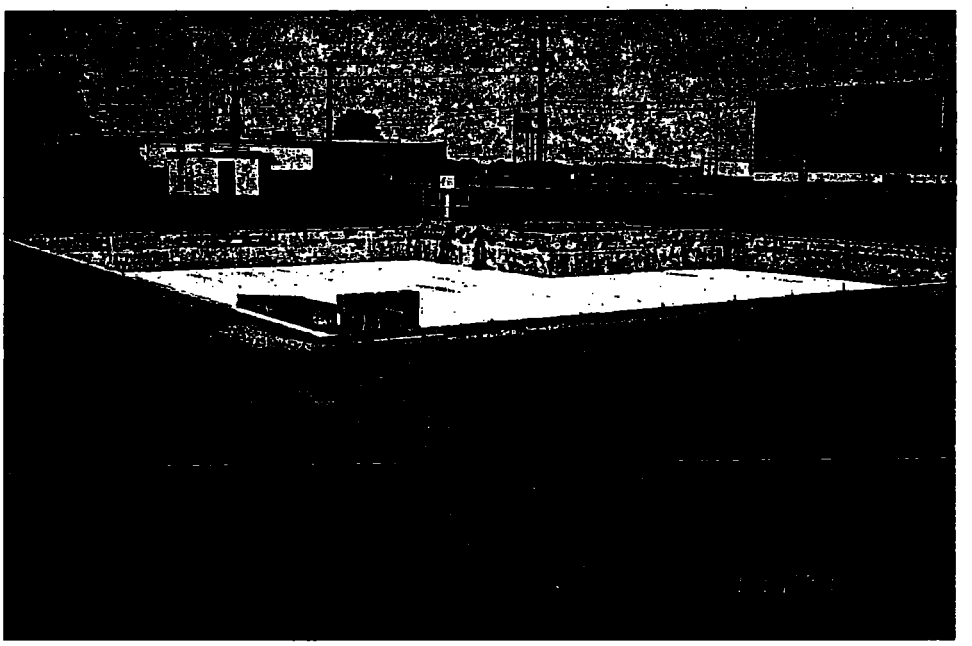


Photograph No. 4 Location: SWMU 2
Orientation: West Date: 07/11/91
Description: This is the chromium retention pond at the wastewater treatment plant (WWTP).

Photograph No. 5 **Location: SWMU 2**
Orientation: Northwest **Date: 07/11/91**
Description: The chromium retention pond (foreground) and the caustic retention pond (background) at the WWTP.



Photograph No. 6 **Location: SWMU 2**
Orientation: Northwest **Date: 07/11/91**
Description: This is the caustic retention pond at the WWTP.



Photograph No. 7 Location: SWMU 2
Orientation: Northwest Date: 07/11/91
Description: The final retention pond at the WWTP. It is covered to keep sunlight out in order to prevent algae growth.

ATTACHMENT C

VISUAL SITE INSPECTION FIELD NOTES

Reynolds Metals Company

009-C05087CH1B

Reynolds Road

P.O. Box 12
Ashville, Ohio 43103

(614)983-2571

Thursday, July 11, 1991

10:07am Arrived at Reynolds
(met with Robert Almquist, OEPA)

10:18am Met with Bob Johnson (Reynolds)
- Plant Engineer
- Explained site visit to Mr. Johnson
- Met Dave Hannahs
- Plant Manager

Approx. ONE - 200yd roll away/6wks
waste generated

10:47 - Began Site Walk Thru.
126.394 acres

- The production part of the facility is surrounded by a chain-linked fence with barb wire on the top. The fence is locked. Every time the gate opens a picture is taken

10:53 - Entered gate.

- Shutter Lines (permit K0165 00045 K008)

- Shutters made from nitrogen foam.

- Go thru a

Tri-Chloroethane paint system.
- system generates dust
[(C) ORM-A]

-odor detected-

- Closed process
- Bad Shutters are blended up and put back in process.

(2)

- Store paint in containers (product)
- Take to painting room when they need to use it. (Pump it out)

- Bulk tank paint storage (product)
- In good shape

- Clean out put in barrel and taken outside.

11:07 a.m. - CHROME Cleaner

- containment area
- where waste stream is generated.

1.5 gallons discharged per minute.

- Caustic Generation Containment area

- odor detected

(3)

- If there is an overflow it is handled by titration

- Caustic waste stream is the result of cleaning metal

- Drain plugged in case of a spill.

A Dam separates two rinses (chrome and caustic)

- Roll Coating (Up stairs)

- odor detected
- Air release area
- Exhaust duct goes to incinerator upstairs.

11:20

- Roll Coating (Downstairs)
  - odor detected
  - paint waste begins when rollers are cleaned

(4)

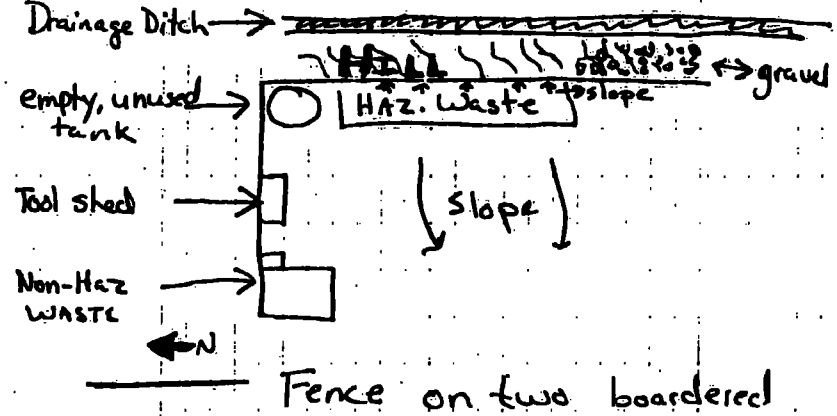
- Remove in bulk trucks (most)
- Remove rest in drums
- pump 85% backwash (liquid)

- Label it take it outside to storage area.

11:25

Outside

Drum storage area on blacktop, which is in poor shape.



Fence on two bordered sides

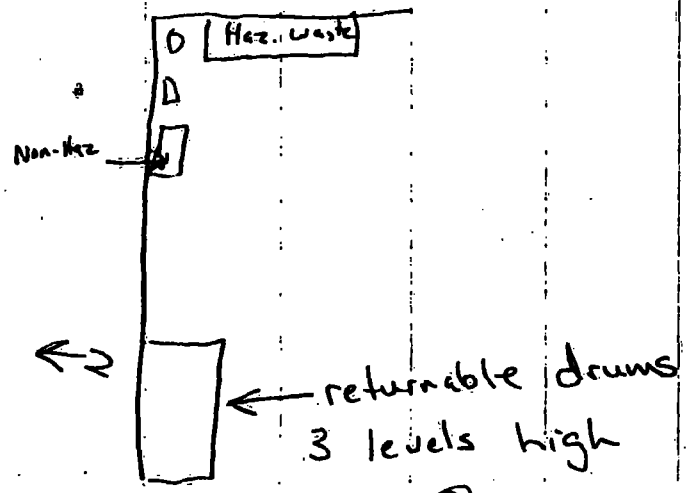
- Blacktop sloped towards Drainage ditch and away from drainage ditch

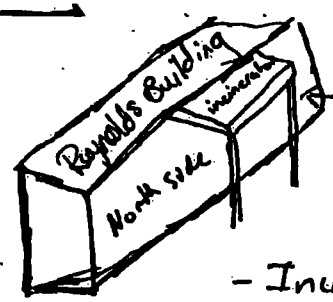
(5)

- Stressed Vegetation, which could be due to several reasons: lack of sunlight, etc.

- everything is brought here for determination.
  - Haz
  - Non-Haz
  - Empty

- Drums stacked 3 ~~stor~~ levels high.
- Some were on wooden pallets
- Drums were metal and plastic





North side of Building

- By Pass stacker

- Incinerator will be replaced

11:35am - August 17, 1991 by CDM in Delaware

- Drainage ditch on west side of the building

11:42 am

- Chrome pond not used
- Found a tear in liner July 10, 1991
- Inspect Daily
- Influent pond

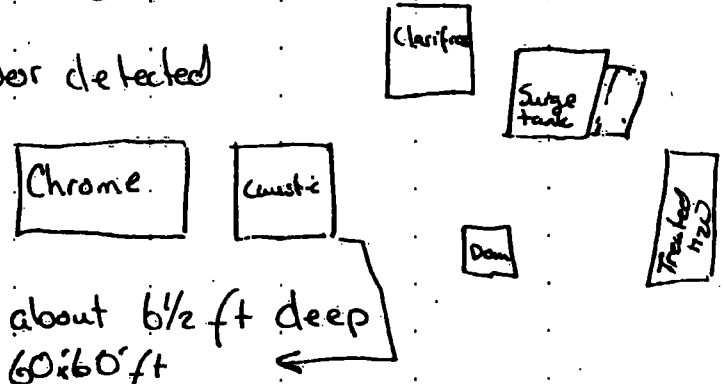
- Mobile Power Wash pumped enough waste out to repair liner
- waste temporarily being stored in 3 tanks.

- Going to close Chrome pond

Been having BOD problems

To fix they have been taking H_2O in plant recirculating into industrial waste

- odor detected



- about 6½ ft deep
  60x60 ft
  5100 gallons

- Keep pH at about 10.5 and add lime to control the algae.

- Built:
  - Sinder block, which has steel rods in it, goes down to slab of concrete,
  - lined
- 60 mill re-enforced hypoline

- Chrome pond has been inactive
- Process when closure starts

12:00 pm
- Surge Tank -
  - weir area
  - determine flow
  - determine how to treat

- acidize and add lime slurry (sulfuric acid) to adjust the pH

12:03
Clarifiers
- Add Coagulant
- Nalco pherilite
- Nalcofloccylant

- Change pH if needed
- If everything runs right they don't have to change it

- Changed cleaner July 10, 1991

- Cover Day Pond to take away sunlight

- Pump Sludge Away
- Decanted water goes to pond
- filter and dewater -
- water goes back to pond

- They do their own pH testing

- Self test - spectrometer
- offical test:
  Check COD to get results for BOD

Take pH from incoming (weir) and at finish

12:13 Roller
20 cubic yards

(10)

DAY POND
Final Treated Water
- Always keep at 2ft
- Clean every 2 to 3 years
- Cover to prevent Algae

Bulk tanks
- Fire Haz. Tanks

Drums from Oil and Grease from Sumps
- profile and dispose

12:25
Caustic Clean → rinse → Chrome conversion coating

Vertical Spray
- Stopped using year ago

12:45 - Left Plant

ROBERT G. JOHNSON
Plant Engineer
Construction Product Division
REYNOLDS METALS COMPANY
Reynolds Road
Ashville, Ohio 43103
(614) 983-2571

(11)

Ex. 365